

Practical Way Of Enhancing Adobe/Smartforms Form Output



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Hi,

In this post, I would like to share with you, how we can enhance a standard adobe or smart forms' output by applying MVC.

As business requirements may differ from SAP standard form format, we may require to enhance an existing form. What usually happens is, functional consultant tells the name of output program and form and developer copies both to Z versions. And worst, all enhancement code is written under code block of form and many new fields are added to global data of interface.

Actually **you do not need to copy the program**. Why? Because, all the inputs, those exists on program, are already given to form as import parameters. Therefore, simply copy only the form, create a class and process required data from import parameters within that model class, to create a single deep structure for output, which is to be used in form.

How I do that is, I create a class and call that class in code block of form's code interface. And as return parameter, I create a deep structure to be used in form context.

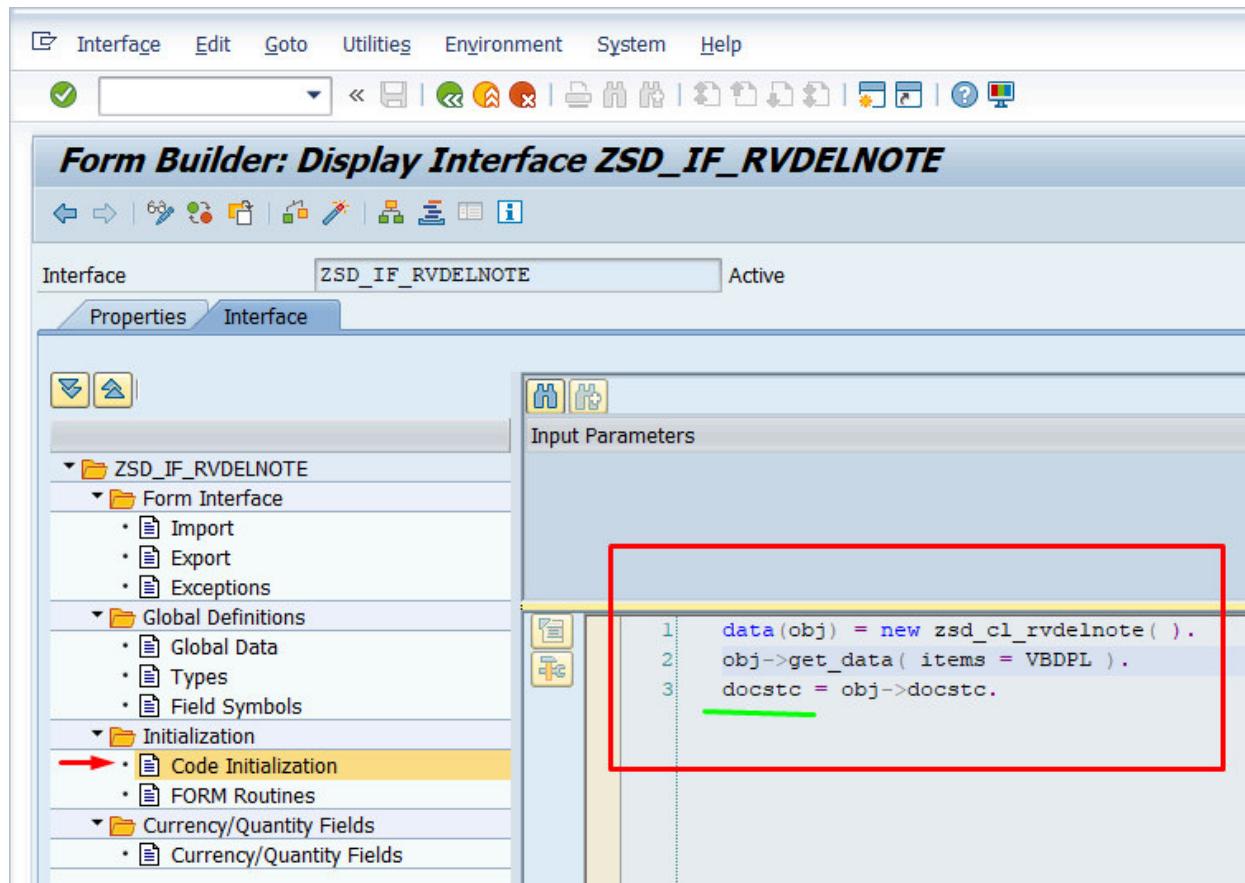
Here is an example. In this example adobe form is copied from standard form, and interface is copied as well. In interface code block, model object is called and get_data method fills global docstc deep structure. The docstc structure contains all required extra data. Instead of using many fields, use single deep structure. In that way if you need to add a new field, that can be achieved simply by adding it to structure. Instead of editing interface and form's related blocks.

Form

The screenshot shows the SAP Form Builder interface for a form named ZSD_AF_RVDELNOTE. The interface structure on the left includes a folder ZSD_IF_RVDELNOTE containing Import, Global Data, and System Fields. The context structure on the right lists various data elements under ZSD_AF_RVDELNOTE, such as ADDRESS, INFORMATION, and ITEM_DETAILS. A specific section, DOCSTC, is highlighted with a red box and contains a detailed list of fields like VBELN, SHIP_TYPE_TEXT_NAME, and LANGU. A note on the left side states "One deep structure to contain all enhanced / required data" with an arrow pointing to the DOCSTC section.

Interface	Context	Description
ZSD_IF_RVDELNOTE	ZSD_AF_RVDELNOTE	Address Delivery Note Information Shipment Details Item Details Footer Details Address on the 2nd master page Folder Text Node TEXT Text Node TEXT Text Node TEXT
	DOCSTC	Adobe Form Structure Sales and Distribution Document Number Name Language Key Smart Forms: Text ZSD_S_IF_RVDELNOTE_DEL Name Language Key Smart Forms: Text Language Key Shipping Point / Receiving Point Insurance type Address Number List for Adobe Form Output Smart Forms: Text Language Key

Interface Code Block



Form Code Interface

Interface Global Data - this data is passed to form context.

Name	Typing	Type Name	Default Value	Constant
DOCSTC	TYPE	ZSD_S_IF_RVDELNOTE		<input type="checkbox"/>

Simple as that, all the complexity is encapsulated in class. And If a new format of the form is required, same class can be used.

Writing code directly under forms code block is a bad practice, it is against mvc, against code reusability and makes developers life definitely more difficult. Simply, using code block just as a controller to pass import parameters to model class and retrieving return data is easier and better practice. Makes code reusable, testable and also modular.

Hope that helps to you.

To have more idea about applying MVC, you can have a look at [Applying MVC in ABAP blog post](#).

Thanks for reading.

Tags:

[mvc](#) [mvc architecture](#)

Comments



tamasbeckerfujitsu Explorer

2022 Dec 30
9:09 AM

If you have huge differences in the forms then you might still want to use different structures. Not just the output, but the input might be also very different. I personally like to see if my code filled up every field that i need without being disturbed by the unneccessary fields of other forms.

Once the structure is not the same, I also cant create a general get_data method because each method needs different structure in the interface.



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1:41 PM

Tamas, What I am trying to tell in blog is, do not write code directly under code block. Instead apply MVC, use code blog as controller to pass and receive parameters. And instead of passing each parameter one by one, place them in a structure, so you won't need to change controller code with field changes.

That is all.